



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/101,846	07/17/1998	LOTHAR FINZEL	P-981197	1129

7590

03/31/2003

Timothy J. Aberle  
Corning Cable Systems LLC  
800 17th Street NW  
Post Office Box 489  
Hickory, NC 28603

EXAMINER

LAVARIAS, ARNEL C

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/101,846

Applicant(s)

FINZEL ET AL.

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-47, 49, 50, 52, 53, 56-71, 74, 76 and 78-90 is/are pending in the application.
- 4a) Of the above claim(s) 2-47, 49, 50, 52, 53 and 56-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 74, 76 and 78-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendments to Claims 74, 81, and 86 in Paper No. 40, dated 2/14/03, are acknowledged and accepted.

### ***Response to Arguments***

2. Applicant's arguments with respect to Claims 74, 76, 78-90 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 74, 76, 78-81, 83-86, 88-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finzel (UK Patent Application No. GB2277812A) in view of Szegda (U.S. Patent No. 5371827), Bonicel et al. (U.S. Patent No. 4790626), and Theys et al. (WIPO Publication WO 90/08336).

With regard to Claims 74, 76, 78, 80-81, 84-86, and 89-90, Finzel discloses an optical fiber transmission system comprising a cable closure with a cable body 1, cable lead-in spigot pipes 5, a sealed closure cover 4, waveguide receiving pipes 25 and cables 25.

Waveguide receiving pipes may be sealed in spigots 5, as by a busing seal (See Finzel, page 4, lines 10-13). One would expect such a pipe to be tightly fitted to seal properly. Although Finzel does not disclose how pipe 25 is secured to pipe section 5, adhesive bonding would have been obvious as a conventional securing means that would assure the desired relationship at all times during shipping and use, regardless of tolerance of manufacture. Additionally, although Finzel does not disclose a waveguide tray or ledges for supporting waveguide trays, waveguide trays, such as splicing trays, are conventional in cable connections and storage systems of coiled cables and therefore would have been obvious. Also, Theys et al. teaches the use of such splicing trays (See for example 10 in Figure 1) which are connected to the splice case on a ledge-like projection (See for example 7 in Figure 1). Additionally, Szegda teaches an end connector for connecting an optical fiber to a port associated to a piece of equipment (See for example Figures 1-19) wherein the waveguide receiving pipes (See for example 10 in Figure 1) are connected to the lead-in spigots (See for example 12 in Figure 1) via sealing connections (See 40 or 46 in Figure 1). Also, the lead in spigots and the waveguide receiving pipes are disclosed as being in contact (See Figures 1-19). Bonicel et al. also teaches an end connector for connecting an optical fiber to a port associated to a piece of equipment (See Figure) wherein the waveguide receiving pipes (See 1A in Figure) are connected to the lead-in spigots (See structure between 6 and 7 on right side of Figure) via sealing connections (See 7 in Figure), as well as a location for securing fiber splices, similar to that of a splice tray (See 9, 11 in Figure; col. 1, line 65-col. 2, line 12). Also, the lead in spigots and the waveguide receiving pipes are disclosed as being in contact (See Figure). Finally, Theys

et al. teaches a splice case for an optical fiber cable (See Figures 1 and 11) wherein the outer surfaces of the cable lead-in spigots (See 31 in Figure 11) and the waveguide-receiving pipes (See 32 in Figure 11), which terminate at the sealing connection and are disposed exteriorly of the closure body interior space (See Figure 11), are in fitting contact with the interior surface of the sealing sleeve (See 30 in Figure 11; Pages 14-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect the waveguide receiving pipes to the lead-in spigots via sealing connections, as taught by Szegda, Bonicel et al., and Theys et al., in the optical fiber transmission system as disclosed by Finzel. One would have been motivated to do this to provide additional mechanical strength and sealing at the connection, thus preventing breakage or injection of debris into the transmission system at the connection.

With regard to Claims 79, 83, 88, Finzel in view of Szegda, Bonice et al., and Theys et al. discloses the invention as set forth above in Claim 74, except for the closure body comprising a base section having a dome shape (in the instant case, Finzel discloses a closure body comprising a base section having a rectangular shape (See 4 in Figure 1)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the closure body comprising a base section having a dome shape, since it has been held that a mere change in shape of an element is generally recognized as being within the level of ordinary skill in art when the change in shape is not significant to the function of the combination. Furthermore, Theys et al. teaches a splice case for an optical fiber cable wherein the closure body comprises a base section having a dome shape (See 22 of Figure 11). One would have been motivated to select a dome shape for

Art Unit: 2872

the purpose of reducing the volume of space the optical transmission system requires for assembly and operation.

5. Claims 82 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finzel in view of Szegda, Bonicel et al., and Theys et al., as applied to Claims 81 and 86 above, and further in view of Grenier.

If a reference really is considered required to demonstrate the conventionality and obviousness of welding, soldering, and/or adhesive bonding in pipe connections, then Grenier clearly provides such teachings (See for example col. 1, lines 10-15 of Grenier).

### *Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 703-305-4007. The examiner can normally be reached on M-F 8:30 AM - 5 PM.

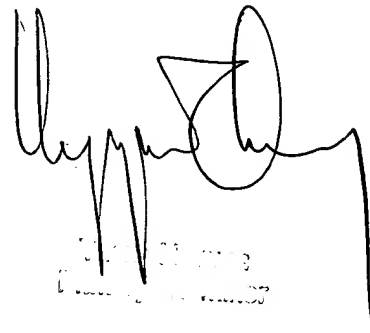
The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Art Unit: 2872

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Arnel C. Lavarias  
March 25, 2003



Stamp: RECEIVED  
MAR 26 2003  
FBI - NEW YORK